

**REMARKS**

Claims 1-17 are pending in the present application.

In the Office Action, the Examiner objected to claims 1 and 12 and requested that Applicants provide pages, line numbers, and drawings that support the feature "to modify at least one angular extent." Applicants note that the specification describes assigning one or more beams to new sectors, which modifies at least one angular extent of transmission associated with the radio, as set forth in independent claims 1 and 12. For example, switch 108 may uncouple amplifier 118D and antenna element 120D from radio 102. Amplifier 118D and antenna element 120D are then coupled to radio 104, which is serving another sector and this sector has in effect been expanded to include a fifth sub-sector. Thus, the angular extent associated with the radio 104 has been modified. See, e.g., Patent Application, page 9, ll. 4-6 and page 10, ll. 2-3, as well as Figures 1-2. Applicants respectfully request that the Examiner's objections to claims 1 and 12 be withdrawn.

In the Office Action, claims 1-5, 7, and 9-11 were rejected under 35 U.S.C. § 102(b) as allegedly being anticipated by Ward (U.S. Patent No. 6,104,930). Claim 6 was rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Ward in view of Feuerstein, et al (U.S. Patent No. 6,141,565). Claim 8 was rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Ward in view of Lopes, et al (U.S. Patent No. 6,453,176). The Examiner's rejections are respectfully traversed.

The Examiner alleges that Ward describes modifying at least one angular extent of transmission associated with the radio. Applicants respectfully disagree. Ward describes four spatially fixed downlink radiation beams, each having an angular beamwidth of around 30°. Ward also describes a control unit 805 for allocating carrier frequencies to the beams. See Ward,

col. 9, ll. 55-67. The control unit 805 may increase or decrease the number of carrier frequencies based on the capacity associated with each of the spatially fixed beams. See Ward, col. 10, ll. 11-22. However, Ward is completely silent with regard to modifying the angular extent of the spatially fixed beams.

In response to the above argument, the Examiner alleges that the angular beamwidth changes according to demand. Applicants respectfully disagree. Ward states that each transceiver may be allocated to one of the spatially fixed beams and "at any one time one transceiver can reside on only one beam in a sector." See Ward, col. 7, ll. 9-10. Consequently, Applicants respectfully submit that the angular extent of the transmissions associated with each transceiver described by Ward remains spatially fixed. Applicants therefore submit that Ward fails to teach or suggest modifying at least one angular extent of transmission associated with the radio, as set forth in the pending claims.

For at least the aforementioned reasons, Applicants respectfully submit that the present invention is not anticipated by Ward and request that the Examiner's rejections of claims 1-5, 7, and 9-11 under 35 U.S.C. 102(b) be withdrawn.

Moreover, it is respectfully submitted that the pending claims are not obvious in view of Ward, Feuerstein, and Lopes, either alone or in combination. To establish a *prima facie* case of obviousness, the prior art reference (or references when combined) must teach or suggest all the claim limitations. As discussed above, Ward is completely silent with regard to modifying the angular extent of the spatially fixed beams. The Examiner relies upon Feuerstein to describe establishing thresholds and Lopes to describe a controller that is a digital signal processor. However, the secondary references do not remedy the fundamental deficiency of Ward.

Furthermore, the prior art of record fails to provide any suggestion or motivation to modify or combined the cited references to arrive at the claimed invention. To the contrary, Ward teaches that the beams are spatially fixed and “at any one time one transceiver can reside on only one beam in a sector.” See Ward, col. 7, ll. 9-10. Thus, Applicants submit that Ward teaches away from modifying at least one angular extent of transmission associated with a radio, as set forth in the pending claims. It is by now well established that teaching away by the prior art constitutes *prima facie* evidence that the claimed invention is not obvious.

For at least the aforementioned reasons, Applicants respectfully submit that the present invention is not obvious over Ward, Feuerstein, and Lopes, either alone or in combination. Applicants request that the Examiner’s rejections of claims 6 and 8 under 35 U.S.C. 103(a) be withdrawn.

In the Office Action, claims 12-17 were rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Smith, et al (U.S. Patent No. 5,021,801) in view of Ward. The Examiner’s rejections are respectfully traversed.

The Examiner admits that Smith fails to disclose modifying at least one angular extent of transmission associated with the radio, as set forth in independent claim 12. The Examiner alleges that Ward describes modifying at least one angular extent of transmission associated with the radio. However, as discussed above, Applicants submit that Ward is completely silent with regard to modifying the angular extent of the spatially fixed beams. Furthermore, Ward teaches that the beams are spatially fixed and “at any one time one transceiver can reside on only one beam in a sector,” which teaches away from modifying at least one angular extent of transmission associated with a radio, as set forth in the pending claims. It is by now well

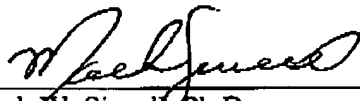
established that teaching away by the prior art constitutes *prima facie* evidence that the claimed invention is not obvious.

For at least the aforementioned reasons, Applicants respectfully submit that the present invention is not obvious over Smith and Ward, either alone or in combination. Applicants request that the Examiner's rejections of claims 12-17 under 35 U.S.C. 103(a) be withdrawn.

For the aforementioned reasons, it is respectfully submitted that all claims pending in the present application are in condition for allowance. The Examiner is invited to contact the undersigned at (713) 934-4052 with any questions, comments or suggestions relating to the referenced patent application.

Respectfully submitted,

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